

REMARKS

Claims 1, 3, 8, 10, 12, 14, 16 and 18 have been amended.

In the Final Office Action, the Examiner rejected applicant's claims 1, 3-6, 8, 10-12, 14-16 and 18-19 under 35 USC 102(a) as being anticipated by the Tsuda, et al. (U. S. Published Patent Application Publication No. 2005/0225662) publication. The Examiner has rejected applicant's claims 2, 9, 13 and 17 under 35 USC 103(a) based on the Tsuda publication. Applicant's claim 7 has been rejected under 35 USC 103(a) as being unpatentable over the Tsuda, et al. publication in view of the Takahashi (U.S. Pub. No. 2002/0118897) publication. Applicant has amended applicant's independent claims 1, 3, 8, 10, 12, 14, 16 and 18, and with respect to these claims, the Examiner's rejections are respectfully traversed.

Applicant's independent claim 1 has been amended to recite an image sensing apparatus having at least a filter insertion/removal device which is operated by a user and inserts and removes an optical filter for reducing a light quantity to an image sensing element serving as an optical system, comprising: a signal processing device which performs signal processing so as to generate image data from an image sensing signal output from the image sensing element; a brightness value calculation device which calculates a brightness value representing a brightness of part or all of an object which is imaged on the image sensing element; a brightness value correction device which calculates a second brightness value by correcting a first brightness value on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by said

brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user; and a control device which controls the signal processing in said signal processing device by using the second brightness value. Applicant's independent claims 3, 8, 10, 12, 14, 16 and 18 have been similarly amended.

In the present invention of claims 1, 3, 8, 10, 12, 14, 16 and 18, the first brightness value is calculated in a case that an optical filter is inserted and the second brightness value is calculated by correcting the first brightness value. This allows signal processing to be suitably performed even if there is a variation of an optical image caused by inserting of the optical filter because the second brightness value is calculated by correcting the first brightness value which is calculated when that optical filter is inserted. These features are not taught or suggested by the cited Tsuda, et al. reference.

In particular, Tsuda, et al. fails to teach or suggest a brightness correction device which calculates a second brightness value by correcting a first brightness value on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by the brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user. Tsuda, et al. discloses an image pickup apparatus with a luminance detecting circuit (507 in FIG. 21) for detecting a luminance signal of a video signal outputted from a CDS/AGC circuit (505) so that an iris (505) is driven based on the detected luminance signal. See, paragraphs [0005]-[0008]. Tsuda, et al. also discloses that a user can operate an ND-filter switching lever (510) for inserting or detaching an ND filter (501) into or from an optical pathway of a lens, and that the ON/OFF state of the ND-filter switching lever is detected by a lens microcomputer of

the image pickup apparatus. See, FIG. 23; Paragraphs [0013], [0027] and [0099]. In Tsuda, et al., when the user changes the state of insertion/detachment of the ND filter, the operation of the iris is controlled so as to minimize the time required for obtaining a correct exposure by causing the iris to operate at a high speed immediately after the ND filter is changed from the OFF-state to the ON-state. See, paragraphs [0099]-[0106]. As shown in FIG. 2 of Tsuda, et al., during operation of the image pickup operation, the luminance signal detector detects the luminance signal (Step S201), based on which the iris control signal is computed (Step S202), the lens microcomputer detects the ON/OFF state of the ND filter (Step S203), and then the low-speed mode or the high-speed mode of the iris is selected based on whether or not the ON/OFF state of the ND filter changed (Steps S204-S206). See also, FIGS. 4 and 22.

Thus, Tsuda, et al. teaches a system in which the luminance signal is first detected, based on which the iris control signal is calculated for driving the iris, and if the ND filter is inserted or detached based on a detection of an ON/OFF state of the ND filter, the driving mode of the iris is changed from the low-speed mode to the high-speed mode. However, Tsuda, et al. is completely silent as to calculating a first brightness value in a case that the optical filter is inserted by the filter insertion/removal device and then correcting the calculated first brightness value on the basis of a light reduction amount generated by inserting of the optical filter to obtain a second brightness value. Rather, Tsuda, et al. only discloses a feedback control system in FIG. 21, wherein a luminance signal is detected periodically, and after each luminance signal determination, the iris is controlled based on the luminance signal and the ON/OFF state of the ND filter. That is, in Tsuda, et al. the luminance signal is periodically determined independently of the insertion or removal of the

ND filter, and the insertion/removal of the ND filter in Tsuda, et al. affects the driving speed at which the iris is driven after the luminance signal is calculated. The insertion/removal of the ND filter in Tsuda, et al. does not have an effect on the way the luminance signal is calculated and on whether or not the luminance signal is corrected.

Moreover, as applicant argued in applicant's Request for Pre-Appeal Review filed on April 7, 2010, the Tsuda, et al. references does not teach or suggest correcting the first brightness value on the basis of a light reduction amount generated by inserting the optical filter. Instead, the feedback control system of Tsuda, et al. detects the luminance signal of the video signal periodically so that the luminance signal is calculated and then newly calculated. Such new calculations of the luminance signal are completely unrelated to the previously calculated luminance signal, and are not in any way equivalent to calculation of a second brightness value by correcting the first brightness value on the basis of a light reduction amount generated by inserting the optical filter.

Based on the above, there is no teaching or suggestion in Tsuda, et al. of calculating a second brightness value by correcting a first brightness value on the basis of a light reduction amount generated by inserting the optical filter by the filter insertion/removal device operated by the user, wherein the first brightness value is calculated by the brightness value calculation device in a case that the optical filter is inserted by the filter insertion/removal device operated by the user. Applicant's amended independent claims 1, 3, 8, 10, 12, 14, 16 and 18, each of which recite such features, thus patentably distinguish over the Tsuda, et al. publication. Moreover, there is nothing added by the Takahashi publication to change this conclusion.

In view of the above, it is submitted that applicant's claims, as amended, patently distinguish over the cited references. Accordingly, reconsideration of the claims is respectfully requested.

Dated: July 7, 2010

Respectfully submitted,



COWAN, LIEBOWITZ & LATMAN, P.C.
1133 Avenue of the Americas
New York, New York 10036-6799
T: (212) 790-9286

Anastasia Zhadina
Reg. No. 48,544
Attorney of Record